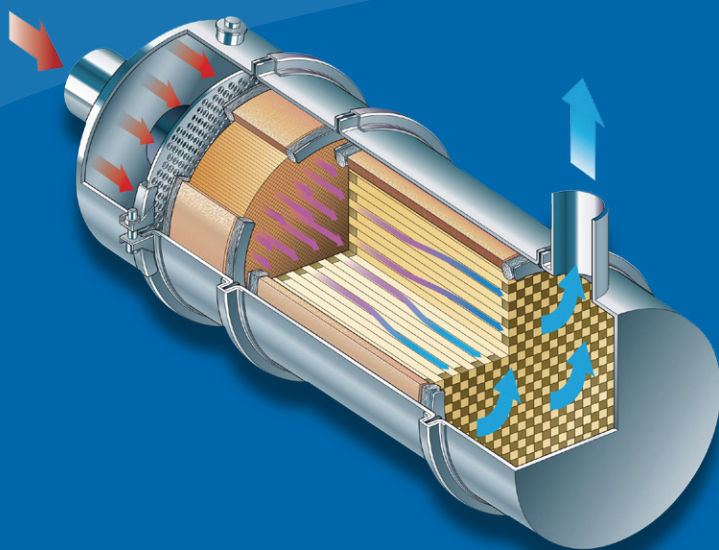




CRT® Filter System

*The on-road verified benchmark technology
for transit fleets, on-highway trucks,
school buses, sanitation, etc.*



Johnson Matthey's 3rd generation CRT® filter (Continuously Regenerating Technology) has revolutionized modern diesel emissions reduction. The first filter verified for the EPA's voluntary retrofit program and the first filter verified by CARB, the CRT has become the industry benchmark for Heavy Duty Diesel Retrofit Technology. The CRT system reduces HC, CO, and PM by 90% or more.



Johnson Matthey
Catalysts



Johnson Matthey
Catalysts

CRT® Filter System

TECHNOLOGY DRIVEN

The CRT particulate filter utilizes Johnson Matthey's patented process which oxidizes soot with NO₂ at a lower temperature than with oxygen. This lower temperature is compatible with typical diesel exhaust temperatures, so no supplemental heat is required.

The device is made up of two chambers. The first contains a substrate coated with a proprietary, highly-active platinum oxidation catalyst designed to oxidize a portion of the NO in the exhaust to NO₂. NO₂ generation is the key to the oxidation of soot collected by the wall flow filter and the heart of the Johnson Matthey patent. The catalyst also converts CO and HC into CO₂ and H₂O.

In the second chamber, exhaust flows through a wall-flow filter, where gaseous components pass through, but soot is trapped on the walls of the filter. The trapped soot is then destroyed by the NO₂ produced by the catalyst in the first chamber.

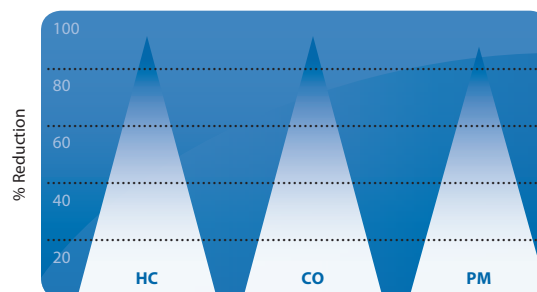
FEATURING

- Reduces HC, CO, and PM over 90%.
- Meets both EPA and ARB NO₂ slip requirements.
- Also verified for use with up to B20 biodiesel blend.
- Modular design for ease of installation and routine service.
- No electrical heaters or fuel injection required.
- JM's NO_x control technology can be easily added to the CRT filter. This allows budget flexibility to phase in your emission control plan.
- Operates with 15ppm or less Ultra Low Sulfur Diesel (ULSD), now widely available nationally.
- Monitored by the CRTdm diagnostic module, the premier device with data-logging and alarm capability.
- Maintenance is minimal. Clean the filter element approximately every 60,000-100,000 miles or as signaled from the CRTdm.

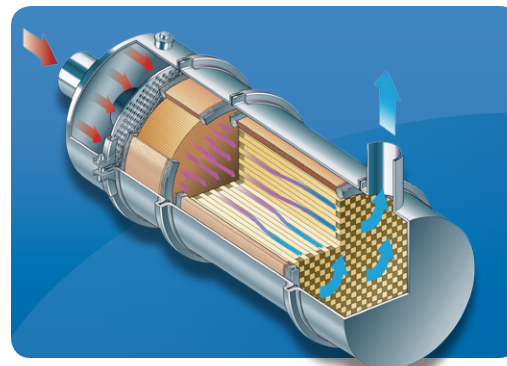
PROVEN SUCCESS

For 40 years, Johnson Matthey has been the global leader in the emission control industry. And when it comes to performance, JM's CRT System has proven itself where it matters most—on the road. With 300,000 CRT systems worldwide, Johnson Matthey retrofit systems offers performance and confirmed durability.

CRT® Test Results



CRT® Diesel Particulate Filter Cutaway



<http://ect.jmcatalysts.com>